

SEMICONDUCTOR LASER DRIVE CIRCUIT AND PHOTOELECTRIC SENSOR

ABSTRACT OF THE DISCLOSURE

A photoelectric sensor and a semiconductor laser drive circuit for a semiconductor laser element including a semiconductor laser drive diode and a monitor photodiode both having respective cathodes connected in common are disclosed. The semiconductor laser diode has an anode connected to a power supply line side and the monitor photodiode has an anode connected to a ground line side via a voltage generating unit. The semiconductor laser drive circuit includes a current control element, adjusting the amount of current supplied to the semiconductor laser diode, a feedback control unit receiving a voltage signal generated by the voltage generating element that is supplied to the current control element producing a control signal according to a level of the voltage signal maintaining the laser beam output at a predetermined level, and a biasing element applying a reverse bias voltage to the monitor photodiode.